



MSSV: 19521529

Họ và Tên: Đậu Trọng Hoàng

Câu 1: Trình duyệt đang sử dụng phiên bản HTTP 1.1 và HTTP server 1.1

21	1.737457	192.168.221.75	192.168.221.74	HTTP	487 GET / HTTP/1.1
22	1.746146	192.168.221.74	192.168.221.75	HTTP	663 HTTP/1.1 200 OK (text/html)

Câu 2:

Địa chỉ IP của máy tính: 192.168.221.75

Địa chỉ của web server: 192.168.221.74

21	1.737457	192.168.221.75	192.168.221.74	HTTP	487 GET / HTTP/1.1
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Câu 3: Mã trạng thái (status code) trả về từ server là: 200

22	1.746146	192.168.221.74	192.168.221.75	HTTP	663 HTTP/1.1 200 OK (text/html)
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Câu 4: Server đã trả về cho trình duyệt: 197 bytes

No.	Time	Source	Destination	Protocol	Length	Info
21	1.737457	192.168.221.75	192.168.221.74	HTTP	487	GET / HTTP/1.1
22	1.746146	192.168.221.74	192.168.221.75	HTTP	663	HTTP/1.1 200 OK (text/html)
65	3.156432	192.168.221.75	192.168.221.74	HTTP	599	GET / HTTP/1.1
66	3.179025	192.168.221.74	192.168.221.75	HTTP	197	HTTP/1.1 304 Not Modified

> Frame 66: 197 bytes on wire (1576 bits), 197 bytes captured (1576 bits) on interface \Device\NPF_{C3E44118-35B0-463F-B041-D25A70CBF982}, id 0

Câu 5: Không có dòng “IF-MODIFIED-SINCE”

21	1.737457	192.168.221.75	192.168.221.74	HTTP	487	GET / HTTP/1.1
22	1.746146	192.168.221.74	192.168.221.75	HTTP	663	HTTP/1.1 200 OK (text/html)
65	3.156432	192.168.221.75	192.168.221.74	HTTP	599	GET / HTTP/1.1
66	3.179025	192.168.221.74	192.168.221.75	HTTP	197	HTTP/1.1 304 Not Modified


```
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9\r\n
Accept-Encoding: gzip, deflate\r\n
Accept-Language: en-US,en;q=0.9\r\n
\r\n
[Full request URI: http://192.168.221.74/]
[HTTP request 1/2]
[Response in frame: 22]
[Next request in frame: 65]
```

Câu 6: Server có trả lại file html. Vì đó là lần đầu tiên máy tính truy cập vào website đó nên chưa lưu cache.

No.	Time	Source	Destination	Protocol	Length	Info
21	1.737457	192.168.221.75	192.168.221.74	HTTP	487	GET / HTTP/1.1
22	1.746146	192.168.221.74	192.168.221.75	HTTP	663	HTTP/1.1 200 OK (text/html)
65	3.156432	192.168.221.75	192.168.221.74	HTTP	599	GET / HTTP/1.1
66	3.179025	192.168.221.74	192.168.221.75	HTTP	197	HTTP/1.1 304 Not Modified


```
[Request URI: http://192.168.221.74/]
File Data: 384 bytes
Line-based text data: text/html (13 lines)
<!DOCTYPE html>\r\n
<html>\r\n
<meta charset="UTF-8">\r\n
<head>\r\n
<title>Thuc hanh nhap mon mang may tinh - 2</title>\r\n
</head>\r\n
<body>\r\n
<center>\r\n
</center>\r\n
<center><h1>MSSV: 19521529</h1></center>\r\n
<center><h2>Họ và Tên: Đậu Trọng Hoàng</h2></center>\r\n
</body>\r\n
</html>
```

Câu 7: Có dòng “IF-MODIFIED-SINCE”. Giá trị của “IF-MODIFIED-SINCE” là: Tue, 20 Oct 2020 07:20:15 GMT\r\n

No.	Time	Source	Destination	Protocol	Length	Info
21	1.737457	192.168.221.75	192.168.221.74	HTTP	487	GET / HTTP/1.1
22	1.746146	192.168.221.74	192.168.221.75	HTTP	663	HTTP/1.1 200 OK (text/html)
65	3.156432	192.168.221.75	192.168.221.74	HTTP	599	GET / HTTP/1.1
66	3.179025	192.168.221.74	192.168.221.75	HTTP	197	HTTP/1.1 304 Not Modified


```
Request URI: /
Request Version: HTTP/1.1
Host: 192.168.221.74\r\n
Connection: keep-alive\r\n
Cache-Control: max-age=0\r\n
Upgrade-Insecure-Requests: 1\r\n
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/85.0.4183.121 Safari/537.36\r\n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9\r\n
Accept-Encoding: gzip, deflate\r\n
Accept-Language: en-US,en;q=0.9\r\n
If-None-Match: "87c7f374b1a6d61:0"\r\n
If-Modified-Since: Tue, 20 Oct 2020 07:20:15 GMT\r\n
\r\n
[Full request URI: http://192.168.221.74/]
[HTTP request 2/2]
[Prev request in frame: 21]
```

Câu 8: Status code request GET thứ 2 là 304 not modified

Ý nghĩa: Trang được yêu cầu không được sửa đổi kể từ lần cuối cùng.

Server không gửi về nội dung của file bởi không có sự thay đổi nên trang web vẫn hiển thị những nội dung của packet cũ.

No.	Time	Source	Destination	Protocol	Length	Info
21	1.737457	192.168.221.75	192.168.221.74	HTTP	487	GET / HTTP/1.1
22	1.746146	192.168.221.74	192.168.221.75	HTTP	663	HTTP/1.1 200 OK (text/html)
65	3.156432	192.168.221.75	192.168.221.74	HTTP	599	GET / HTTP/1.1
66	3.179025	192.168.221.74	192.168.221.75	HTTP	197	HTTP/1.1 304 Not Modified

Câu 9: Trình duyệt đã gửi 2 HTTP GET. Gửi tới địa chỉ: 192.168.221.75

No.	Time	Source	Destination	Protocol	Length	Info
21	1.737457	192.168.221.75	192.168.221.74	HTTP	487	GET / HTTP/1.1
22	1.746146	192.168.221.74	192.168.221.75	HTTP	663	HTTP/1.1 200 OK (text/html)
65	3.156432	192.168.221.75	192.168.221.74	HTTP	599	GET / HTTP/1.1
66	3.179025	192.168.221.74	192.168.221.75	HTTP	197	HTTP/1.1 304 Not Modified

Câu 10: Trình duyệt đã gửi 1 HTTP GET. Dòng “THE BILL OF RIGHTS” được chứa trong gói tin phản hồi thứ 1.

The screenshot shows the Wireshark interface with the 'http' filter applied. The packet list shows two HTTP packets. The packet details pane for the selected packet (Frame 14) shows the 'Hypertext Transfer Protocol' section expanded, displaying the line-based text data: 'text/html (98 lines)'. The visible text includes the HTML head section with the title 'Historical Documents:THE BILL OF RIGHTS'.

Câu 11: Cần 4 TCP segments để chứa hết HTTP response và nội dung của The Bill of Rights.

The screenshot shows the Wireshark interface with the 'http' filter applied. The packet list shows two HTTP packets. The packet details pane for the selected packet (Frame 14) shows the 'Transmission Control Protocol' section expanded, displaying the reassembly information: '[4 Reassembled TCP Segments (4861 bytes): #11(1300), #12(1300), #13(1300), #14(961)]'. The 'Segment count: 4' is also visible.

Câu 12: Status code HTTP response đầu tiên là 401 Unauthorized

Ý nghĩa: Thông tin đăng nhập không hợp lệ

No.	Time	Source	Destination	Protocol	Length	Info
11	0.658661	64:ff9b::8077:f50c	2402:9d80:3e5:b2d5::...	HTTP	791	HTTP/1.1 401 Unauthorized (text/html)
22	0.462047	2402:9d80:3e5:b2d5::...	64:ff9b::8077:f50c	HTTP	641	GET /wireshark-labs/protected_pages/HTTP-wireshark- HTTP/1.1
34	0.790294	64:ff9b::8077:f50c	2402:9d80:3e5:b2d5::...	HTTP	594	HTTP/1.1 404 Not Found (text/html)

Câu 13: Khi trình duyệt gửi HTTP GET lần thứ 2, trường dữ liệu mới xuất hiện trong HTTP GET là Authorization.

*Wi-Fi

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http

No.	Time	Source	Destination	Protocol	Length	Info
6	0.347598	2402:9d80:3e5:b2d5:105f:bd40:4907:118d	64:ff9b::8077:f50c	HTTP	556	GET /wireshark-labs/protected_pages/HTTP-wireshark- HTTP/1.1
11	0.058661	64:ff9b::8077:f50c	2402:9d80:3e5:b2d5:105f:bd40:4907:118d	HTTP	791	HTTP/1.1 401 Unauthorized (text/html)
22	6.462947	2402:9d80:3e5:b2d5:105f:bd40:4907:118d	64:ff9b::8077:f50c	HTTP	641	GET /wireshark-labs/protected_pages/HTTP-wireshark- HTTP/1.1
34	6.790294	64:ff9b::8077:f50c	2402:9d80:3e5:b2d5:105f:bd40:4907:118d	HTTP	594	HTTP/1.1 404 Not Found (text/html)

< >

> Frame 22: 641 bytes on wire (5128 bits), 641 bytes captured (5128 bits) on interface \Device\NPF_{C3E44118-35B0-463F-B041-D25A70CBF982}, id 0

> Ethernet II, Src: 54:27:1e:b8:e9:7d, Dst: 28:02:d8:21:bd:cc

> Internet Protocol Version 6, Src: 2402:9d80:3e5:b2d5:105f:bd40:4907:118d, Dst: 64:ff9b::8077:f50c

> Transmission Control Protocol, Src Port: 54560, Dst Port: 80, Seq: 1, Ack: 1, Len: 567

▼ Hypertext Transfer Protocol

> GET /wireshark-labs/protected_pages/HTTP-wireshark- HTTP/1.1\r\n

Host: gala.cs.umass.edu\r\n

Connection: keep-alive\r\n

Cache-Control: max-age=0\r\n

> Authorization: Basic d2lyZXNoYXJrLXN0dWUlbmRzOm5ldHdvcm0=\r\n

Upgrade-Insecure-Requests: 1\r\n

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/86.0.4240.111 Safari/537.36\r\n

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9\r\n

Accept-Encoding: gzip, deflate\r\n

Accept-Language: en-US,en;q=0.9\r\n